OF THE OPENING OF RIVERS FOR NAVIGATION.

The Benefit exemplified,

By

The Two *AVONS*

Of

Salisbury and *Briſtol.*

WITH

A *Mediterranean* Paſſage by Water for BILLANDERS of Thirty Tun, between *Briſtol* and *London.*

With the Reſults

LONDON,

Printed by *G. Dawſon*, 1660.

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TO THE

Moſt High and Mighty MONARCH,

Charles the Second:

By the Grace of God, King of *England*, *Scotland*, *France*, and *Ireland*, Defender of the Faith.

May it Pleaſe Your Majeſty.

THere is nothing of greater advantage to a Land, than the opening of Rivers, that by the Communication of them, the more *Inland* Countries may not only abound with all the varieties in which they exceed, but that all other manner of Goods, (though never of ſo great burthen) may be daily imported or exported to the incredible eaſe and benefit of the Subject.

Your Majeſties great Predeceſſor, *Henry* the 1*ſt.* was well experienced in this truth, who by cutting a Channel upon the *Trent* for ſeven miles length, did bring it down to his City of *Lincoln*, and being the firſt that conveyed ſo great a benefit to his people, doth ſtand alone by its ſelf, in fame and glory. No doubt but the like hath been deſired by other Princes of this Nation, who being hindred either by Forraign or Domeſtick Warrs, or wanting the help and advice

of good Artiſts, could not accompliſh (though attempted) with ſo much honour and advantage.

It having pleaſed Almighty God, to reſtore Your Majeſty to the Government of this Nation, and Your Majeſty having of your ſelf a delight in the water, I have preſumed to make this addreſs unto Your Majeſty, concerning a Navigable paſſage upon the two famous Rivers of *Avon* and *Thames*, to the Cities of *London* and *Salisbury*, and ſo to the Sea, which will be a work of great advantage, were your Majeſty ſo gratiouſly pleaſed, that it might be eſtabliſhed by Act of *Parliament* (as was that noble paſſage by water from *London* to *Oxford*) & no leſs encouragement would it be to the undertakers, who then would undergo ſo famous a work even at their own charge, and through all ages would crown your Majeſties praiſes, & love to the publick; for Rivers will remain when Cities and Towns do fall, and it will be no little honour unto me, that in ſo great a work your Majeſty will deſcend from the height of your own judgment, to reflect on the endeavours and the experience of him, who is,

Your Royal Majeſties moſt unworthy, but moſt humble and devoted Servant.

Francis Matthew.

Servant, and Captain of a Troop of Horſe in His late Majeſties Service; as by his Commiſſions doth appear.

Who left noe way vnſought w.th those in p.rſent Goverm.r to perfect ſo laudable a deſign.

If Your Majeſty approve of this Overture preſented, and be pleaſed to command my attendance on the Lords of your Majeſties Privy Council, I ſhall be ready to give them futher ſatisfaction herein, for the perfecting this ſo glorious a deſign, and remove all difficulties; and wheras I have ſet down in my printed papers this Navigable paſſage to be uſed only in the winter ſeaſon, when our Rivers do Swell, yet upon a re-ſurvey, we do find with a little more charge, for carrying Veſſels of forty Tun burthen, or thereabouts, all the yaer long.

Of the Opening of Rivers for Navigation, &c.

IN theſe *Papers* we are not to reflect upon this Iſland, as capable of ſuch Waterings as the flat Netherlands, whoſe Benefits may ſeem to allure us to the like Induſtry; Nevertheleſs *Englands* fair Valleys, and rich In-lets, through which many noble Rivers inſinuate themſelves, might, with the imitation of the induſtrious Netherlander, be made in many places docible of Navigation, to the ineſtimable comfort, ſatisfaction, eaſe, and profit of the publick, eſpecially during the ſeven (which we call) Winter-months, when Waters abound in our Rivers, and the Sea-coaſts ſo dangerous for Navigation: but with more charge Navigation may be maintained all the whole year, upon many of our Rivers.

The Objections of the differences of the Soyl, muſt not deterr us from ſo advantagious an enter-

prize, there wanting thereunto nothing but a *Resolution of the powerful Undertaker.*

And since that word *Undertaker* is fallen from my Pen, it must pass for a principle with me, That such great and publick Works are not to be attempted by private men, or any particular Corporation, But most fit it were, that the *State* it self should be the sole Undertaker, performing all at its own proper charge; and so may justly settle upon every such Passage, *a Revenue to the Common-wealth for ever.*

But before any particular Work in this kinde be Resolved upon, the Expence is to be weighed, with the Benefits to the publick; and these laid in equal balance, it will soon appear, Whether that one particular Design, will be profitable or not.

To clear this, a supposed Instance may be made in the Citizens of the noble City of *Salisbury*, as humbly making suit, That their *Avon* falling into the Sea at *Christchurch*, might be opened to small flat-bottom Vessels, Billanders of 30 Tun, which Loaden, draw only three foot and a half Water; and this as well for the Sea, and its Commodities to be imported, as for the easier carrying down the Fruits of *Mendip*-Hills, and of all that part of the West, to all those parts below, which stand in so much need thereof.

The Charge must be looked into with the Profits: and though the Expence might seem great, yet must it not affright the publick *Undertaker*: For besides the high Obligation this should lay upon

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on the City of *Salisbury*, and all those adjacent parts, for so great and everlasting a Gift, which to a *State* ought to be a prevalent motive: The *State* it self might also reflect upon the benefit not only to the people, but also to its own Revenue accruing by that Navigable passage, settled upon the Commonwealth for ever: It being a known maxime of State, that *by what the People, by the same the Government groweth rich.*

Moreover, it must be thought that the desires of the people in the instance before cited, were grounded upon apparent benefits conceived.

This Example may serve for all other such passages by water aimed at, the which ought to be made as apparently beneficial, as feazible: the Charge, as hath been said, being fit for *no Undertaker, but the State it self*: and the more such Navigable passages should Meander and winde within the Land, still would the benefit more and more arise.

Rivers may be compared to States-men sent abroad; they are never out of their way: so they pass by great Cities, Marts, Courts of Princes, Armies, Leaguers, Diets, and the like Theaters of Action, which still contribute to the increase of their Observation; So Navigable Rivers, the more places of Note they pass by, the more they take up, or bring; still gleaning one Commodity or other from the Soyl they pass through, and are supplied by every Town they touch at with imployment.

The Benefites which will evidently arise by opening of such Rivers in this Commonwealth

Bacon *in his Natural History calleth these the richest Mines above ground.*

as shall be found beneficially capable of Navigation, are numerous and great; of which some few we will her touch.

By this industry, as it increaseth, will be raised many thousand of Watermen, fit at any time to be taken into the service *of the State*, and what waterman will not think himself highly advanced, to come out of a River into the Sea; out of a *Bilander, into a man of War*, whose constant pay will be far greater; and whose imployment will be of much more credit, and carry it with more hope of preferment. Hence also many thousands of Horse, now only used for Packs and Burthens, would be spared, & our Studderies more capable for Warlike service, and the feeding of small Tits imployed upon improvable stocks.

The facility of Commerce from one place to another; and the cheapness of transportation of Commodities, without so much grinding and plowing up our high-wayes, which maketh them now in many places so impassable.

You shall see Western waggons, which they call Plows, carry forty hundred weight; insomuch as between *Bristol* and *Marlborough*, they have been enforced at a Hill they call *Bagdown-hill*, to put twenty Beasts, Horse and Oxen, to draw it up. This great abuse, by this means would be taken away, by keeping our High-wayes pleasant; and withal, by this transportation of Commodities by Rivers, the price of Commodities would fall.

The Imposition, though easie, laid upon every such Navigable passage, would, as Rivers by degrees are opened, amount to a fair revenue, without

any

any grievance at all to the people, but rather with much comfort, as it is imbraced in other Countries, where they cannot live without the help of these Billanders, passing and repassing daily from Town to Town, from Market to Market, and from Coast to Coast; These are onely some few of so many benefits, which will result from the opening of our Rivers.

General Observations upon all Rivers, as they are thought fit to be made Navigable.

TO rise as high in opening the said Rivers as they shal be found feazible; there to make a Wharf, Magazine, or Warehouse for all such Commodities as are useful to those parts of the Country, both for Trade in Merchandizing, & service in time of War, with far greater expedition.

If any other River, practicable for Boats, lye neer the head, or side of the said River, and that the ground favour the opening of a still River to be drawn between them, then to joyn them with Sasses, *alias* Locks, or otherwise. But should the ground be repugnant, then a fair stone Cawsey, not exceeding one little daies journey for Horse, or Carts, to be raised between the said Rivers. Where the Navigation ends, a Wharf, or Magazine to be made as aforesaid, if these reach from Sea to Sea, not otherwise. For the example of Cawseys, let the head of *Foy* River, & that of *Padstow* in *Cornwall* be examined, for a Cawsey to be made between them.

By the like industry, many Mediterranen passages

See Rastal *at large in his Havens & Rivers upon the 67 of* Eliz.

Let the head of the Avon wch falleth down from Rugby *to* Warwick, *and so into the Severne, be examined with the* Welland, *which riseth neer to the head of the Avon, & falleth down to* Stanford, *and so through the Isle of* Ely, *into the Sea.*

Which would revive that Country with imployment.

ges by Water, with the help of ſuch Cawſeys, would be found from one Sea to the other, and not to have the old Channel of any River to be forſaken to gain a ſhorter paſſage. For, as hath been ſaid, Rivers are never out of their way; and upon theſe Navigable paſſages, our chief Manufactures ſhould be ſet up, for the Commoditie of traſportation.

Object. Theſe great Works alwaies bring forth great difficulties, though the benefit be never ſo apparent.

Anſw. Can any thing of this nature ſeem difficult *to a State reſolved to do good to its peoole?* Difficulties are the boundaries of narrow hearts, ſuch is not to be the heart *of a State*, which ſhould moſt rejoyce in difficult things, in the overcoming of which, ſo much honor is atchieved.

A buſineſs well pondered and ſeriouſly reſolved on, by a powerful *Undertaker*, is carried like the World upon *Atlas* ſhoulders, without groaning.

Object. 2. Moſt of our Rivers in the Summer time will want water to carry a Boat, even our Thames ſometimes is ſo ſhallow, as our Barges are gravelled.

Anſw. Such Rivers as ſhall be judged fit for Navigation muſt not be debarred the Contribution which other Springs, Brooks, and Rivers would give them; wherefore all ſuch Streams, great or ſmall, which would willingly fall into our ſaid Rivers deſigned for Navigation, ought to be free, and not to be bound up with Wears, Sluces, Pens for Mills, and the like *impreſtures*, which keep up, ſtop, and divert the Waters from their natural Courſe, and fall into thoſe Navigable Rivers. Thoſe

Theſe expreſly forbidden in Magna Charta, *cap.* 2. *See* Henr. primi, *cap.* 12. *Alſo* Walſingham, *in* Edw. 3 *And* Sir John Davis *in his* Iriſh Reports.

Thoſe Mills either the State ſhould buy of the Owners of them, and erect for every Water-mill three Horſe-mills, for the neceſſity of the Country adjoyning, or ſo agree with the Owners of them, that they pulling up their Water-mills and ſuch apparent purpreſtures for the free Courſe of Waters, ſhould themſelves ſet up the ſaid Horſe-mills for the uſe of the Country in places more convenient, then to go in ſome place a mile or two to a Water-mill, which asketh a daies imployment for a man and Horſe.

And truly, if the conſumption of our Timber hold on but ſome few yeers more, there will be none left to build either Water-mil, or Wind-mil, they requiring the beſt and ſtrongeſt Timber we have: ſo that of neceſſity we ſhal be driven to ſet up theſe Horſe-mills, which are built with our meaneſt Wood, our Oak being little enough to maintain our Shipping, were it never ſo well preſerved hereafter.

The *Avon* of *Briſtol* made Navigable as high as *Malmsbury* and *Calne*, with the Profits for tranſportation of Coals, and other Commodities.

Which alſo may with facility produce a Mediterranean paſſage by Water from *Briſtol* to *London*.

The Coal-pits in *Kings-wood* neer *Briſtol*, and if they ſuffice not, thoſe Colliaries upon the Severn ſide, to furniſh that Country ſo much deſtitute of Fuel up to *Malmsbury* and *Calne*, in this manner may be looked upon: This River made Navigable for Billanders, flat-bottomed Boats of 30 Tun,

which

which draw loaden but three foot and an half Water. The Work being feazible at a far leſs Charge than the yeerly profits will come to; theſe Colliaries are to be dealt with to bring Coal either out of *Kings-wood*, or from the Severn, to a place aſſigned them for Wharfage, they affording the *Newcaſtle* Chaldron at the ſaid Wharf for 10 *s.* 2 *d.* being now ſold at the Pitts at one penny the *London* Buſhel.

Theſe of Kingſwood are upon the States *own ſoyl.*

Thoſe Colliaries in *Wales*, the State may take into its own hands, giving the Owners yeerly more for them than they now make of them.

Fewer will ſuffice ſhould the Billanders carry 40 Chaldron

Theſe Colliaries ſetled, and the River of *Briſtol* made Navigable, *the State* to licence 300 of theſe Billanders, each bearing 30 Chaldron (onely *London* meaſure) and theſe to bring Coal from the Wharf up the ſaid River as high as *Malmsbury* and *Calne*, paying 10 *s.* 2 *d.* the *London* Chaldron at the Wharfs, and 5 *s.* for every ſuch Chaldron for the paſſage up the River, and ſell them at *Malmsbury* and *Calne* for 18 *s.* 2 *d.* the *London* Chaldron, where now they are ſold for much more.

There ſold at 18s. 2 d. London Chaldron. That is, 6 d. the Buſhel.

The Owner, or Merchant of the Wharf having for every ſuch *London* Chaldron delivered, 10 *s.* 2 *d.* The *State* for the paſſage of every ſuch Chaldron 5 *s.*

The Billander for his Fraight for every ſuch Chaldron, 3 *s.*

Surplus of meaſure to belong to the State.

The difference of *Newcaſtle* and *London* meaſure in the Chaldron, being the third Coal, two *Newcaſtle* Chaldron making three of *London*: *The ſurplus of meaſure ſhould be given to the State*, to be landed neer the ſaid Wharfs, upon a Wharf called the *States Wharf*.

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The other Wharfs to be divided into six; every Wharf having its Squadron of 50 Billanders, belonging to the Owners and Merchants of the several Wharfs; which Wharfs may have their names from the Colours they shall bear.

These Wharfs to be kept by the Owners of the Coal which lieth upon them, who are to receive (as hath been said) 10 *s.* 2 *d.* for every Chaldron given out, *London* measure.

These Billanders are to sayl up the River, every Squadron by its self, having each his Admiral, and Rear-Admiral, carrying their Flags of proper Colours, none of the said Squadron sayling before his Admiral, nor any behind his Rear-Admiral; and this to prevent disorder as they pass through the Country. Thus we may play upon Rivers.

They are so to discharge both the duties at the Wharf, and the duties for the Passage, as to make no stay at all.

Every Admiral at the discharge of the duties for his whole Squadron (for he is to undertake it) is to receive a Ticket for his free passage through the River, without which they are not to pass the Block-house or Fort erected for preserving the *States revenue*, if any mutiny should arise.

These Wharfs aforesaid, are to have correspondent Wharfs at *Malmsbury*, and *Calne*, and to be regulated as the former, one Squadron not unlading at anothers Wharf; where each Billander is to receive for its fraight of 30 Chaldrons, 4 *l.* 10 *s.* every voyage; and two of these voyages may well be made in one month.

The Wharfs paying the Billanders their Salary,

and keeping the Coal for all such as fetch it there at 18 *s.* 2 *d.* the *London* Chaldron.

As concerning the Coal before mentioned to be laid upon the *States Wharf*, being the third Coal gained in the *Newcastle* measure, that also is to have at *Malmsbury* and *Calne* a Wharf called the *States Wharf*, corresponding to the former, where that surplus of measure should be laid, and kept for the benefit of the *State*, in thankfulness for that great charge in making the River thus Navigable, for the benefit of the Country: And here both the benefit of the Coal, and Passage, cometh to *the State* (the fraight of the Billander onely excepted.)

The ground-work being thus laid, the Profits are these:

	l.	*s.*	*d.*
Every Billander fraight with 30 *London* Chaldron for the Passage onely, Fruits to *the State* every voyage	7	10	--0
Every Squadron of 50 of these Billanders, for Passage onely, fruits *to the State* every voyage	375	--0	-0
Every voyage of 300 Billanders for Passage onely, fruits *to the State*	2250	-0	-0

Surplus of Measure to the State *alone*:

	l.	*s.*	*d.*
Every such Billander fraight with the Surplus of measure upon the third Coal, fruits *to the State*, both for Coal and Passage	22	10	-0

Every

	l.	s.	d.
Every Squadron of 50 Billanders, every voyage fraight as aforesaid, fruits *to the State*	1125	0	0
Every voyage of those 300 Billanders fraight as aforesaid, fruits to *the State*	6750	0	0
These in general from *Bristol* to *Malmsbury*, & *Calne*, making two voyages every month in 7 months, carry 126000 Chaldron, which fruits to the *State* in these 7 months, in this sole Commoditie of Coal, though much more Coal will be carried	l. 525	00	00

The Coal as they are first brought to the Wharfs should be so ordered, as the third Coal be duly carried to the Wharf of the State.

As to clear what hath been said, If 20 Chaldron *Newcastle* measure be brought from the Pits to the Wharfs, they are to be divided into 30 Chaldron *London* measure, of which the *State* is to have ten Chaldron laid upon its Wharf, and so proportionably to all that are brought from the Pits to any Wharf, the third Coal being alwaies carried to the *States Wharf*. The Staple of Coal being thus setled for all that Country about *Malmsbury* and *Calne*, and Coal being sold there constantly for 18 *s.* 2 *d.* the *London* Chaldron to all that will fetch them, that is, at the price of 6 *d.* the *London* Bushel; No question is to be made, but that a marvelous great quantity will be thus vented, to the great blessing of the People, who now pay about *Calne* and *Malmsbury* not much under 12 *d.* the bushel, & commonly more, being carried by Horse from *Bristol*:

Should 50000 Chaldron only be thus yeerly vented, it is a great Revenue, and would in the very *Profits to the State* riſe in this ſole

Commoditie of Coal, unto	*l.*	*s.*	*d.*
	20833	6	8
That is, for Paſſage	12500	0	0
And for the third Coal gained	8333	6	8

But there will be treble the quantity vented.

And no doubt *Briſtol*, ſo great a place of Traffick, would make uſe of this River as high as *Calne* towards the Tranſportation of their Merchandize *from Briſtol to London*, it being the worſt and moſt Hilly part of the way, and lieth full in the paſſage to *London*.

A Billander of 30 Tun, laden with Merchandize from *Briſtol* to *Calne*, taking but one Farthing *per* pound, fruits to the *State* every Voyage	*l.*	*s.*	*d.*
	62	10	0

It may well make two Voyages every Month.

This River being thus practiſed as high as *Malmsbury* and *Calne*, ſhould our Seas be at any time infeſted with Enemy Fleets in ſuch ſort as without eminent danger, *London* and other parts of this Common-wealth, could not be ſerved with *Coal* from *Newcaſtle* and *Sunderland*:

How facile a thing it were from *Malmsbury*, lying upon the ſaid River, to open a paſſage for theſe Billanders of 30 Tun, which draw Water but three foot and half, loaden, into the River *Iſis*, by *Creeklade* and *Letchlad*, and ſo into the *Thames*, all that Land-paſſage being not fully 3 miles (inviting the *Undertaker*) being very low, and practicable ground, moſt fit for the Deſign.

Were the Billanders to carry 40 chaldron, 250 of them would carry 10000 Chaldron at one Voyage.

This Paſſage opened, the proffits to the *State*, would riſe to a vaſt Sum, and far greater then that of *Coal*.

By

By this means there would be a *Mediterranean* paſſage opened from *Briſtol* to *London* by Water.

Not only for the ſupply of much *Coal* in time of neceſſity, but for all other Commodities brought into *Briſtol*, which in time of Hoſtility *London* could not otherwiſe enjoy, but by exceſſive Rates for Land-carriages, or Convoyes by Sea: but by this Paſſage once opened, all Commodities may be brought from *Briſtol* to *London* (even at one Farthing *per* ponnd) we now paying all the Winter-time for carriage by Land between *London* and *Briſtol*, 4 *s. per cent.*

Our Forreign Vintage never permitting us to bring home Wines till the beginning of *November* when our Channel is very dangerous, the Merchant would be glad to ſecure his Voyage by this *Mediterranean* Paſſage by unloading his Wines at *Briſtol*, without any further hazard.

The whole Charge of this Navigable Paſſage would be paid with the proffits of the firſt year: And as for *Coal* for 2 *s.* more upon the *London* Chaldron for Fraight, they alſo this way would be brought to *London* at 20 *s.* 2 *d.* the Chaldron, *London* Chaldron. Howſoever great Caution ought to be uſed, that during times of Peace no *Coal* ſhould be brought to *London* this way, to the end our Shipping, which is much imployed in the Tranſportation of that Commodity, might ſtill be kept up, for the ſafety, benefit, and honour of this *State.*

It were good that the 2 *d.* upon every Chaldron were paid towards the defraying of the Salaries of Officers

Officers upon the Whatfs, and towards the maintenance of the Paſſage yearly.

At *Cardiff*, the neareſt Colliary to *Briſtol*, that is upon the Severn, excellent *Scotiſh-Coals*, which alſo would drive a great Trade upon this Paſſage, being ſold by the Tun.

This Paſſage in time of Peace might be uſed for Tranſportation of Merchandize to *London*, and from *London* to *Briſtol*, only from the firſt of *October* to the firſt of *April*; partly not to obſtruct our Navigation by Sea, all the Summer-time, when the doubling of the Cape of *Cornwal* is not dangerous, nor our Coaſts ſo ſubject to ſtorms: And partly by reaſon of the *Avon*, and *Iſis*, and the *Thames* it ſelf in thoſe Winter-months will not want Water, which in the Summer they do, unleſs other Rivers be let into them, which cannot be done without more Charge: And for *Coal*, our Seas being not infeſted, none ſhould paſſe higher then *Malmsbury* and *Calne*, not to hinder, as hath been ſaid, our Navigation, for that Commodity by Sea, which muſt ſtill be endeavoured to be kept up to the full.

Now who ſhould be the *Undertaker* of this great Work, but *the State* it ſelf: it being too great an Expence for any private man or Corporation to lay out; and of too great a Profit for them to receive, being effected.

This to be obſerved well by the Cities of Bath *and* Briſtol, *leſt they labor in vain.*

Some endeavours have been uſed by that noble Patriot, Sir *John Harrington*, to make this River Navigable between *Briſtol* and the *Bath*, which Work I have ſeen: but the Deſign being too narrow for this our great Propoſal, it were in vain to

be

be again ſet upon, either by any private man, or the ſaid two Towns, unleſs they intend to make the River and their Saſſes ſo large as the River to carry Billanders of 30 Tun, or more.

I went down to ſee Sir *John Harrington's* intended Saſſe, ſome two miles below the *Bath*, and I found the Engineer to have much abuſed the noble Knight in his Work, making his Saſſe upon the very Dam of the River, which would have been a perpetual and forcible Enemy to his Work. Beſides, I found by Meaſuring his Saſſe, that it would contain but one Boat of 8 Tun: which narrow Deſign would no way have ſerved to this our *Mediterranean* Paſſage, but muſt have been again ript up and deſtroyed: The Saſſe it ſelf being to be otherwiſe placed, and made far larger, capable of a Boat of 30 or 40 Tun.

He who hath ſeen the Saſſe, between *Ipris* and *Vuerne* in *Flanders*, will confeſſe it a noble Work, and capable of Publick Service (which this I ſpoke of no way is) yet much is the memory of that noble Knight to be honoured, in ſhewing himſelf to his Ability, a publick man, labouring ſo much for the good of his Country.

Many Saſſes are to be made upon this River of *Avon*, it being ſo much a Falling-water, inſomuch it is now forced to be kept up with many Dams, every one of which muſt have his Saſſe, but not upon the Dam, but upon the ſide of it.

The Propoſer of this Paper *hath no other intereſt in this Deſign, then a true Patriot ought to have,*

have, a desire for the Publick good, to see it effected, and by it his Country served: And if he shall perceive it embraced, it will encourage him to offer up to the Publick Service of his Country other Improvements of greater Consequence.

FINIS.

A *Mediterranean* Paſſage by Water between the two *Towns Lynn* and *Yarmouth*, &c.

May it pleaſe your Highneſs.

THus I ſhall ſtate the buſineſſe which at preſent I intend to preſent to your powerful hand, and under your potent Protection to the whole Commonwealth, the which Work is even already framed to the end intended; that is, Nature having ſo bountifully concurred with her own endeavours to the effecting thereof, in undergoing the greateſt charge, which commonly is the chiefeſt ſtop in all bnſineſſes of this nature.

The flouriſhing Havens of *Lyn* and *Yarmouth* being ſo Portuous, ſo much frequented with Shipping, and ſo plyed with Trade, it is apparent that the two Countes

Counties adjoyning, *Norfolk* and *Suffolk*, receive much comfort thereby, being more indulgently dealt withal by their two Havens then remoter parts, as particularly assisted by their importations, furnished by that means with many Forreign commodities, which come flowing into those Ports.

These two Rivers above named, the *little Ouse* and *Waveney*, running as it were between the two Havens, and in a manner dividing those two Counties, were they opened for Navigation, would very much encrease the benefit both to those Haven Towns, in venting of those their Importations, as also prove a great ease to the said two Counties to have so facile, and cheap a passage made to bring those Commodities unto them, and withal thereby to vent what they produce of their own.

These two Rivers are so favourably cast by Nature, as in the Winter (when they will be most for use) the Heads of them already almost meet, at a place called *Loppham Bridge*, where a Navigable Channel being cut, (in length lesse than a mile) the two Rivers would joyn for mutual Commerce from *Lynn* to *Yarmouth*; and withal Boats might rest at any place of these Rivers, there to make their Magazins of such Forreign Importations, as the Countries adjoyning stand in need of; others might touch at every Market Town, there standing at the least six or seven upon, or very neer adjoyning to the said Rivers; and within distance of ten miles, very many Market Towns more, the which in the end of this Paper I shall set down, with their several distances from those two Rivers; which Rivers I observe to lie so neer upon a *Level*, as few *Sasses* will be required, to lessen the charge.

charge. What a bleſſing and eaſe would this afford to all the Inhabitants neer adjoyning, upon all Market daies (as they do in *Flanders*) to carry themſelves, and their Commodities by Water (avoyding thoſe deep waies in the Winter ſeaſon, eſpecially on *Suffolk* ſide) from Town to Town, from Market to Market, at ſuch rates, as will not be conſiderable, if compared to their charge, and trouble in going by Horſe or Cart?

Theſe advantages for the increaſe of Commerce, and Trade, your Highneſs wiſdom will ſoon penetrate, and give heat unto, by your potent approbation, your Highneſs being generally obſerved to be moſt zealous in the ſetting forward of Trade, taking ſo much to heart the increaſe thereof.

Neither doth this Deſign of mine contain it ſelf within the verge of the aforeſaid two Rivers, nor in the advance of Trade brought into thoſe great Havens of *Lynn* and *Yarmouth*, but it reacheth higher, and extends to the uniting the In-land Commerce upon Rivers between the North and Eaſt of *England*, there being no obſtacle (were theſe two Rivers opened for Navigation) no hinderance at all, but that which our careleſneſs hath negligently caſt aſide, and made no uſe of for many years) to impead our Navigation upon Rivers within the Land, from the Haven of *Yarmouth*, to the Citie of *York*.

Our *Henry* the firſt, (as Mr. *Camden* well obſerveth in his deſcription of *Lincolneſhire*) cut a Channel for the ſpace of ſeven miles from *Torkſey* upon the *Trent* down to the Citie of *Lincolne*, there to joyn with the River *Witham*, which falling into the Haven

of

of *Boſton*, comes through the *Iſle* of *Ely*, into theſe our two Rivers the *Little Owſe* and *Waveney*, and ſo to *Yarmouth*, Mr. *Camden* ſaith, this gallant King cauſed that memorable work of ſeven miles to be caſt up for the benefit of his City of *Lincolne*, though other Writers ſpeak of a mixt intention therein, as partly to facilitate his own *Removes* from one part of the Kingdome to another, he being the firſt King who brought *Progreſſes* into faſhion, ſo making his people equally participant of him, that they might ſee and know him better by himſelf, than by his picture.

He was an active and wiſe Prince, and as all Rulers of States have ever their deſigns headed with ſeveral ends, ſo might this King in this very work; as upon any forreign invaſion, or domeſtick inſurrection, to tranſport from one ſide of the Kingdom to another his Army, without grievance to his people for billeting of his Souldiers through the Country as they paſſed, or tyring out his men with long Marches, but to have them ready for action upon a moment, for by this very work of his of ſeven miles, cut out for Navigation, (conjoyned to what Nature before had wrought) he might have tranſported an Army by Water, all within the Land from the Eaſt part of *England* into the North, without the leaſt noiſe of landing, and have been upon his Enemies before they dreampt of him, in this ſilent and covered way. Howſoever his ends were, it was a noble Work, and a Gift worthy to come from a Crown, it being *the firſt Preſident that I have found in England of joyning Rivers for Navigation*, which ſhoweth (even then) how forward, and prone toward Improvement this Kingdom was.

But what an unworthy neglect thereof hath been in theſe latter times, I bluſh to write! To let it fall, to be of no uſe, and the Work (though yet extant) to lye empty, waſt, and dry, far from the intention of the Royal giver! in ſo much as now Sheep, and Cattel graze, where formerly Barks have ſayled, and perhaps a King in them.

This Work, or Channel of 7 miles, commonly called *Foſſe Dike*, were it repaired, and the Banks in ſome places made up, would eaſily again be made capable of Navigation, and revive that ſafe, rich, and large extended Commerce, which by that means did formerly ſpread it ſelf within the Land, and would open the paſſage for Boats, as hath been ſaid, between *York* and *Yarmouth*, to the unſpeakable comfort of very many Towns and Villages lying near, and upon the Paſſage, and would yield a general benefit both to the Eaſt and North of *England*, and by participation all *England* over.

It hath been obſerved upon *Level* taken, that the *Trent* lyeth lower than *Foſſe Dike* by Two Foot, or thereabouts, ſo that of neceſſity in that place there muſt be *A Saſſe* to draw up, and let down the Boats. And indeed if we look upon our Sea Coaſts of *Lincolnſhire* and *Norfolk*, they are ſo wanting of Harbours, and of places to relieve Ships in, in time of ſtreſſe, eſpecially upon a ſtrong Eaſterly Wind, as I may well term them importuous, for any Ships of Burden, ſo that in the Winter time (when our Inland paſſage will be moſt in play) the great frequented Haven of *Hull* will be willing to ſerve it ſelf with theſe Rivers Navigable, for the more ſafe conduct of their Merchandize into the Eaſt parts of *England*. And ſeeing our Forreign Vintage never comes into our dangerous Chan-

nel till the beginning of *November*, in my judgment he were a desperate Merchant who will adventure Men, Ship, and Goods in saying farther North, when he might secure all by unloading at *Yarmouth*, and making use of this safe Passage upon Rivers, even up to *York*.

These, and the further advantages of this secure Transportation of all Commodities within the Land upon Rivers, between the North and East of *England* all the Winter season (when the Coast is so dangerous) I need not any further set forth to your Highness, whose Wisdom will soon imbrace them all, and accordingly reflect upon them to the benefit of the publick.

One thing I had almost omitted, amongst the many helps which the opening for Navigation of these Two Rivers between *Norfolk* and *Suffolk* would afford those Counties, that is, the supply of *Fuel*, which by this means may be brought unto them with great facility; *Sea Coal* now supplying the defects of our *Wood*, so much these latter years consumed, and I may well say destroyed.

And were *Fosse Dike* repaired for Navigation (which now lieth waste) what a recruit would that also bring to all the East parts of *England*, by Transporting this way *out of Nottingham-shire, Darby-shire, & Leicester-shire, Pitt Coal* (which in Forrein parts they call *Scots Coal*) which in abundance might be fetched by the help of this passage?

Though in this very point *Caution* were to be had, that no such *Coal* should be carried out of those Counties this way, but from Pitts new sunk, and from places where *Coals* have not been sought. That the inhabitants of those parts should not suffer by this exportation: And I shall make evident to your Highness, That there are indeficient Mynes of this *Coal* to supply this

Trade

Trade abundantly, where never any yet were sought for, and not in any far distance from the River of *Trent*; the State contracting with the Owners of the Soyle (much of that Soyle is now already in the possession of the State) so that by this means no prejudice should arise to the Inhabitants.

Moreover at *Boston* (where they must pass) there might be a *Magazine* for that *Coal*, either for us to Transport, or for Forreiners to fetch them there, which would raise a very great *Revenue* to the State, that *Coal* being sold in Forrein parts by weight, at very high Rates.

But much fitter for us to do it, for increas of our Shipping.

This Paper out of my bounden Respect, and Duty to your Highness, I offer unto your Prudence and deep Consideration, I conceiving it to contain matter of very great Honour to your Highness, and no less benefit and comfort to the whole Common Wealth.

Rivers running through the Earth, as the Veins of that Body, which Opened in due time, and with good advice, give comfort and refreshments to all the Earth they run through, like to the veins in our bodies, which being opened by the advice of the learned Physitian, restore health, repair strength to the decaying man, and brings him into a flourishing condition.

By this Passage your Highness will see all Forreign Commodities brought into us from the East parts of the world equally distributed, to the North and East of England; *As by the former Design of Opening the Rivers between* Bristol *and* London, *all the Western Commodities brought in from abroad, were to be Communicated to the West and South of* England.

Designs worthy to be brought forth under the happy Protection of your Highness.

Market-Townes

Standing upon, or near

The Little Owſe

AND

VVAVENEY.

Brandon,	*Bungey,*
Thetford,	*Beckles,*
Diu,	*Leſtof,*
Harleſton,	*Yarmouth.*

OTHER

Market-Towns

Within Ten Miles of these

RIVERS.

FRom *Beckles* to *Yarmouth* 9 miles.

From *Beckles* to *Leſtof* 8 miles

From *Bungey* to *Norwich* 10 miles.

From *Yarmouth* to *Norwich* already a Navigable paſſage.

From *Harleſtone* to *Windham* 9 miles

From *Dis* to *Windham* 10 miles

From *Loppham-Bridge* to *Higham* 10 miles

From

From *Loppham* to *Harling* 3 miles

From *Loppham* to *Bucknam* 5 miles

From *Thetford* to *Watton* 9 miles

From *Brandon* to *Swafham* 10 miles

From *Beckles* to *Sowld* 9 miles

From *Beckles* to *Harleſtone* 7 miles

From *Bungey* to *Harleſtone* 7 miles

From *Harleſtone* to *Framlingham* 8 miles

From *Dis* to *Buddeſdall* 3 miles

From *Dis* to *Debenham* 9 miles

From *Dis* to *Aye* 3 miles

From *Loppham* to *Wolpett* 9 miles

From *Loppham* to *Stow* 9 miles

From *Loppham* to *Nedeham* 10 miles

From *Brandon* to *Mildnall* 6 miles

All theſe Market-Towns, beſides innumerable Villages, with many Gentlemens-Houſes

Houſes of Note, would ſo make uſe of theſe Two Rivers, that a marvelous Trade would be driven upon them; and Sayling out of *the Little Owſe*, the Boats enter into *the Great Owſe*, which already is Navigable to *Lynn*, and to all the Towns within the *Iſle* of *Ely*, even up to *Cambridge*.

Being but one days Work for a Team.

FINIS.

Houses of Note, would so make use of these Two Rivers, that a marvelous Trade would be driven upon them; and Sayling out of *the Little Ouse*, the Boats enter into *the Great Ouse*, which already is Navigable to *Lynn*, and to all the Towns within the *Isle of Ely*, even up to *Cambridge*.

Being but one dayes Work for a Team.

FINIS.

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